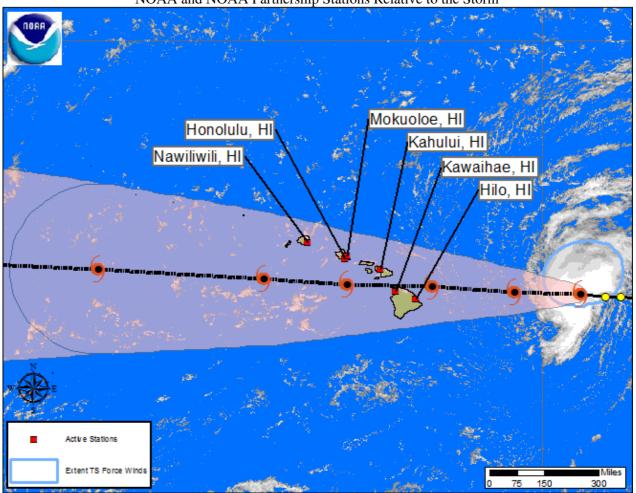


NOAA and NOAA Partnership Stations Relative to the Storm



# Storm Analysis

As of 7/28/2013 12:00 HST, water levels in the Hawaiian Islands are generally at or slightly above predicted tide levels. Winds are generally under 10 knots across the Hawaiian Islands with a few isolated gusts over 20 knots. Barometric pressure is steady across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur. Water level predictions relative to <u>Mean Lower Low Water</u> are:

Hilo, Hilo Bay, Kuhio Bay, HI: Next predicted high tides are 1.8 ft (0.54 m) at 07/28/2013 19:05 HST and 1.8 ft (0.56 m) at 07/29/2013 09:36 HST.

Kawaihae, HI: Next predicted high tides are 1.3 ft (0.40 m) at 07/28/2013 20:10 HST and 1.7 ft (0.52 m) at

07/29/2013 10:23 HST.

Kahului, Kahului Harbor, HI: Next predicted high tides are 1.7 ft (0.52 m) at 07/28/2013 17:56 HST and 1.6 ft (0.49 m) at 07/29/2013 09:12 HST.

Mokuoloe, HI: Next predicted high tides are 1.5 ft (0.46 m) at 07/28/2013 17:58 HST and 1.5 ft (0.46 m) at 07/29/2013 10:23 HST.

Honolulu, HI: Next predicted high tides are 1.2 ft (0.36 m) at 07/28/2013 20:20 HST and 1.6 ft (0.50 m) at 07/29/2013 10:44 HST.

Nawiliwili, HI: Next predicted high tides are 1.1 ft (0.35 m) at 07/28/2013 19:33 HST and 1.5 ft (0.46 m) at 07/29/2013 10:36 HST.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst:TKM

# SELECT CENTRAL PACIFIC HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM FLOSSIE ADVISORY NUMBER 16 NWS CENTRAL PACIFIC HURRICANE CENTER HONOLULU HI EP062013 1100 AM HST SUN JUL 28 2013

...FLOSSIE WEAKENS SLIGHTLY AS IT CONTINUES TO MOVE TOWARD THE HAWAIIAN ISLANDS...

WATCHES AND WARNINGS

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CHANGES WITH THIS ADVISORY...

A TROPICAL STORM WARNING WARNING HAS BEEN ISSUED FOR OAHU. A TROPICAL STORM WATCH HAS BEEN ISSUED FOR KAUAI AND NIIHAU.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A TROPICAL STORM WARNING IS IN EFFECT FOR...

\*HAWAII COUNTY

\*MAUI COUNTY...INCLUDING THE ISLANDS OF MAUI...MOLOKAI...LANAI AND KAHOOLAWE

\*OAHU

A TROPICAL STORM WATCH IS IN EFFECT FOR \*KAUAI AND NIIHAU

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED WITHIN THE WARNING AREA WITHIN 36 HOURS.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE

POSSIBLE WITHIN THE WATCH AREA WITHIN 48 HOURS.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY THE HONOLULU NWS FORECAST OFFICE.

#### **DISCUSSION AND 48-HOUR OUTLOOK**

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AT 1100 AM HST...2100 UTC...THE CENTER OF TROPICAL STORM FLOSSIE WAS LOCATED NEAR LATITUDE 19.9 NORTH...LONGITUDE 148.5 WEST. FLOSSIE IS MOVING TOWARD THE WEST NEAR 20 MPH...32 KM/H...AND THIS MOTION IS EXPECTED TO CONTINUE THROUGH THE NEXT 48 HOURS...WITH A SLIGHT SLOWING IN FORWARD SPEED.

MAXIMUM SUSTAINED WINDS ARE NEAR 60 MPH...95 KM/H...WITH HIGHER GUSTS. SOME WEAKENING IS FORECAST DURING THE NEXT 48 HOURS.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 160 MILES...260 KM FROM THE CENTER.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 996 MB...29.41 INCHES.

## HAZARDS AFFECTING LAND

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WIND...TROPICAL STORM CONDITIONS ARE EXPECTED TO REACH THE BIG ISLAND AND MAUI COUNTY MONDAY MORNING...AND ARE POSSIBLE ON OAHU MONDAY NIGHT.

RAINFALL...HEAVY RAINFALL IS EXPECTED TO BEGIN AS EARLY AS MONDAY MORNING OVER HAWAII COUNTY AND MONDAY AFTERNOON OVER MAUI COUNTY... WITH HEAVY RAIN SPREADING TO OAHU BY MONDAY NIGHT. FLOSSIE IS EXPECTED TO PRODUCE TOTAL RAINFALL AMOUNTS OF 6 TO 10 INCHES OVER THE BIG ISLAND AND MAUI COUNTY...WITH ISOLATED MAXIMUM AMOUNTS OF 15 INCHES POSSIBLE...MAINLY WINDWARD. RAINFALL AMOUNTS OF 4 TO 8 INCHES ARE POSSIBLE OVER OAHU...WITH ISOLATED MAXIMUM AMOUNTS OF 12 INCHES POSSIBLE...MAINLY WINDWARD. THIS RAINFALL COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUD SLIDES...ESPECIALLY IN THE MOUNTAINS.

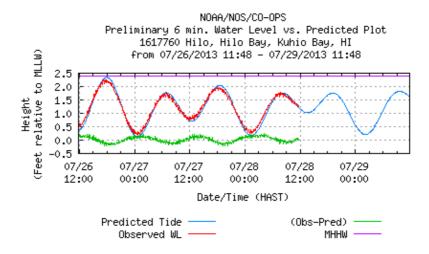
SURF...DANGEROUSLY LARGE SURF WILL BEGIN TO IMPACT EAST FACING SHORES OF THE ISLANDS AS EARLY AS TONIGHT WITH THE LARGEST SURF EXPECTED ON MONDAY INTO TUESDAY. BE AWARE THAT LARGE SURF CAN CAUSE COASTAL ROAD CLOSURES...EVEN BEFORE THE STORM ARRIVES. PLEASE CONSULT THE LATEST HURRICANE LOCAL STATEMENT FOR INFORMATION SPECIFIC TO YOUR AREA.

## FORECASTER POWELL

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Hilo, Hilo Bay, Kuhio Bay - Water Level, Hilo, Hilo Bay, Kuhio Bay - Winds, Hilo, Hilo Bay, Kuhio Bay - Barometric, Hilo, Hilo Bay, Kuhio Bay - Air/Water Temp, Kawaihae - Water Level, Kawaihae - Winds, Kawaihae - Barometric, Kawaihae - Air/Water Temp, Kahului, Kahului Harbor - Water Level, Kahului, Kahului Harbor - Winds, Kahului, Kahului Harbor - Barometric, Mokuoloe - Water Level, Honolulu - Winds, Honolulu - Barometric, Nawiliwili - Water Level

## Hilo, Hilo Bay, Kuhio Bay, HI - Return to List



Last Observed Sample: 07/28/2013 11:48 (HAST)
Relative to MLLW: Observed: 1.33 ft. Predicted: 1.19 ft. Residual: 0.14 ft. Historical Maximum Water Level: Jan 20 1981, 3.77 ft. above MLLW

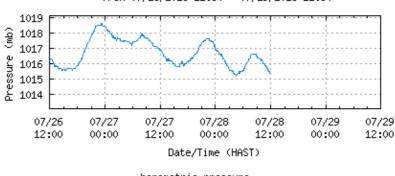
# Hilo, Hilo Bay, Kuhio Bay, HI - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 1617760 Hilo, Hilo Bay, Kuhio Bay, HI from 07/26/2013 11:54 - 07/29/2013 11:54 30 360 25 speed (knots) 270 20 direction 15 180 10 90 5 0 07/26 07/27 07/27 07/29 07/29 07/28 07/28 12:00 00:00 12:00 00:00 12:00 00:00 12:00 Date/Time (HAST) direction speed gusts ·

Last Observed Sample: 07/28/2013 11:48 (HAST) Wind Speed: 9 knots Gusts: 10 knots Direction: 16° T

## Hilo, Hilo Bay, Kuhio Bay, HI - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 1617760 Hilo, Hilo Bay, Kuhio Bay, HI from 07/26/2013 11:54 - 07/29/2013 11:54



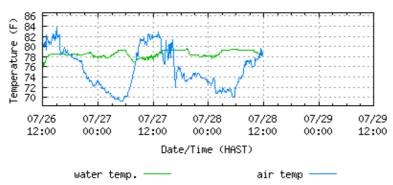
barometric pressure

Last Observed Sample: 07/28/2013 11:48 (HAST)

Barometric Pressure: 1015.4 mb

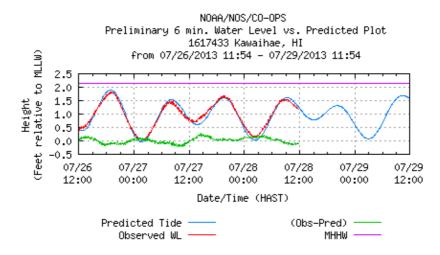
## Hilo, Hilo Bay, Kuhio Bay, HI - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 1617760 Hilo, Hilo Bay, Kuhio Bay, HI from 07/26/2013 11:54 - 07/29/2013 11:54



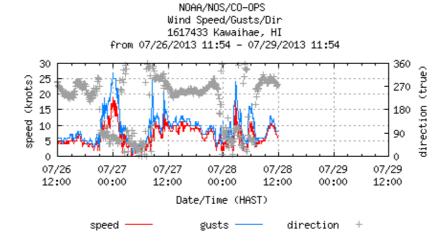
Last Observed Sample: 07/28/2013 11:48 (HAST) Water Temperature: 78.3° F Air Temperature: 78.8° F

## Kawaihae, HI - Return to List



Last Observed Sample: 07/28/2013 11:42 (HAST)
Relative to MLLW: Observed: 1.18 ft. Predicted: 1.27 ft. Residual: -0.09 ft. Historical Maximum Water Level: Dec 13 2008, 3.38 ft. above MLLW

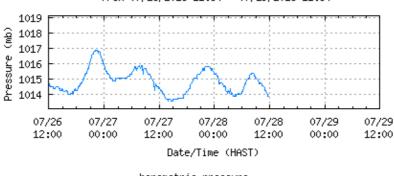
## Kawaihae, HI - Return to List



Last Observed Sample: 07/28/2013 11:42 (HAST) Wind Speed: 6 knots Gusts: 8 knots Direction: 277° T

## Kawaihae, HI - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 1617433 Kawaihae, HI from 07/26/2013 11:54 - 07/29/2013 11:54



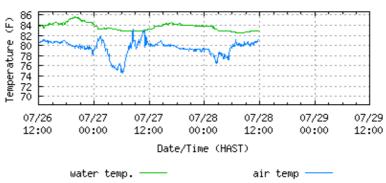
barometric pressure

Last Observed Sample: 07/28/2013 11:42 (HAST)

Barometric Pressure: 1013.9 mb

## Kawaihae, HI - Return to List

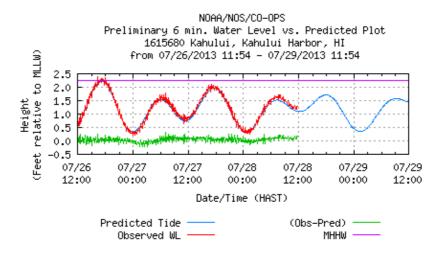
NOAA/NOS/CO-OPS Air/Water Temperature Plot 1617433 Kawaihae, HI from 07/26/2013 11:54 - 07/29/2013 11:54



Last Observed Sample: 07/28/2013 11:42 (HAST)

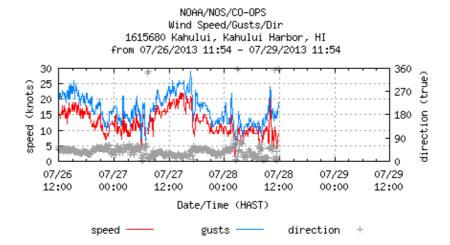
Water Temperature: 82.9° F Air Temperature: 81.1° F

## Kahului, Kahului Harbor, HI - Return to List



Last Observed Sample: 07/28/2013 11:42 (HAST)
Relative to MLLW: Observed: 1.27 ft. Predicted: 1.10 ft. Residual: 0.17 ft. Historical Maximum Water Level: Dec 20 1968, 3.48 ft. above MLLW

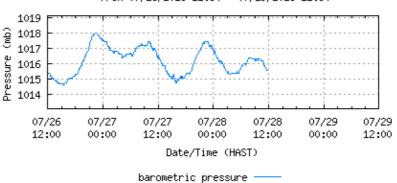
# Kahului, Kahului Harbor, HI - Return to List



Last Observed Sample: 07/28/2013 11:42 (HAST) Wind Speed: 9 knots Gusts: 19 knots Direction: 358° T

## Kahului, Kahului Harbor, HI - Return to List

NOAA/NOS/CO-OPS
Barometric Pressure Plot
1615680 Kahului, Kahului Harbor, HI
from 07/26/2013 11:54 - 07/29/2013 11:54



Last Observed Sample: 07/28/2013 11:42 (HAST)
Barometric Pressure: 1015.6 mb

## Mokuoloe, HI - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 1612480 Mokuoloe, HI 9 2.5 from 07/26/2013 11:54 - 07/29/2013 11:54 (Feet relative to M 0.0 0.1 20 0.0 20 0.0 20 0.0 20 0.0 07/26 07/27 07/27 07/28 07/28 07/29 07/29 12:00 00:00 12:00 00:00 12:00 00:00 12:00 Date/Time (HAST) Predicted Tide (Obs-Pred) Observed WL MHHW

Last Observed Sample: 07/28/2013 11:48 (HAST)
Relative to MLLW: Observed: 1.29 ft. Predicted: 1.13 ft. Residual: 0.16 ft. Historical Maximum Water Level: Jan 8 1974, 3.58 ft. above MLLW

## Mokuoloe, HI - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 1612480 Mokuoloe, HI from 07/26/2013 11:54 - 07/29/2013 11:54 30 360 (true) 25 speed (knots) 270 20 15 direction 180 10 90 5 0 07/28 07/27 07/27 07/28 07/29 07/29 07/26 12:00 00:00 12:00 00:00 12:00 00:00 12:00 Date/Time (HAST)

Last Observed Sample: 07/28/2013 11:48 (HAST) Wind Speed: 10 knots Gusts: 14 knots Direction: 39° T

gusts

direction

speed

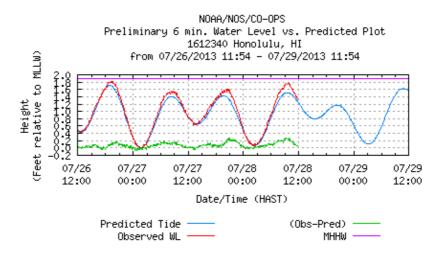
## Mokuoloe, HI - Return to List

NOAA/NOS/CO-OPS

Barometric Pressure Plot 1612480 Mokuoloe, HI from 07/26/2013 11:54 - 07/29/2013 11:54 1019 Pressure (mb) 1018 1017 1016 1015 1014 07/26 07/29 07/27 07/27 07/28 07/28 07/29 12:00 00:00 12:00 00:00 12:00 00:00 12:00 Date/Time (HAST) barometric pressure

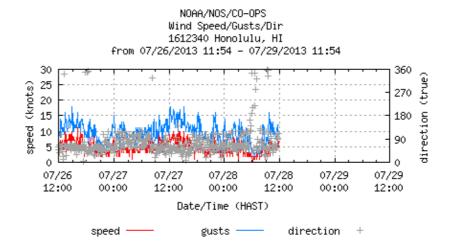
Last Observed Sample: 07/28/2013 11:48 (HAST)
Barometric Pressure: 1016.5 mb

## Honolulu, HI - Return to List



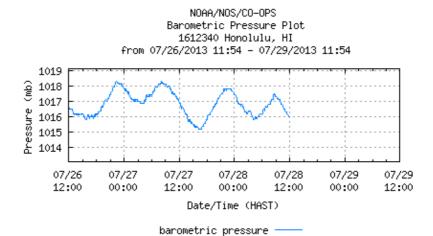
Last Observed Sample: 07/28/2013 11:42 (HAST)
Relative to MLLW: Observed: 1.35 ft. Predicted: 1.28 ft. Residual: 0.07 ft. Historical Maximum Water Level: Feb 14 1967, 3.39 ft. above MLLW

## Honolulu, HI - Return to List



Last Observed Sample: 07/28/2013 11:42 (HAST) Wind Speed: 5 knots Gusts: 12 knots Direction: 111° T

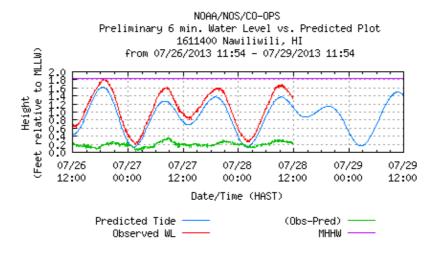
#### Honolulu, HI - Return to List



Last Observed Sample: 07/28/2013 11:42 (HAST)

Barometric Pressure: 1016.0 mb

#### Nawiliwili, HI - Return to List



Last Observed Sample: 07/28/2013 11:48 (HAST)
Relative to MLLW: Observed: 1.34 ft. Predicted: 1.12 ft. Residual: 0.22 ft. Historical Maximum Water Level: Sep 11 1992, 4.98 ft. above MLLW

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce